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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,673	11/13/2003	David Zimmerman	5038-299	9857

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EXAMINER

LE, THONG QUOC

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/713,673	Applicant(s) ZIMMERMAN, DAVID	
	Examiner Thong Q. Le	Art Unit 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-27,31-39 is/are allowed.
- 6) ☒ Claim(s) 28 and 29 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment filed on 01/17/2006 has been entered.
2. Claims 1, 4-39 are presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 1,4-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (U.S. Patent No. 5,398,325)

Regarding claim 28, Chang et al. disclose an article of manufacture (Figure 2) comprising computer-readable media containing instructions (Column 7, lines 43-46) that, when executed by a processor (Figure 2, 2), cause that processor to perform a method comprising:

transmitting commands over a system management bus (Figure 2, 8) to a first buffered memory module to cause that buffered memory module to exercise a memory channel between the first buffered memory module and a second buffered memory module (Column 10, lines 39-47); and

receiving results of the transmitted commands from the first buffered memory module over the system management bus (Column 10, lines 44-47).

Regarding claim 29, Chang et al. disclose wherein transmitting commands comprises at least one of reading and writing data to memory located on the second buffered memory module (Column 7, lines 40-46, Column 12, lines 54-61).

Regarding claim 30, Chang et al. disclose selecting one of a plurality of buffered memory modules connected to the system management bus as the first buffered memory module, and addressing the transmitted commands to the selected memory module.

Allowable Subject Matter

6. Claims 1, 4-14, 15-20, 21-27, 31-39 are allowed.

Claims 1, 4-14, 15-20, 21-27, 31-39 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Chang et al. (U.S. Patent No. 5,398,325), and others, does not teach the claimed invention having a buffered memory module test fixture comprising a master memory buffer having a host-side memory port, and control bus routed to the master memory buffer connection point, to propagate control signal to the master memory buffer to cause the master memory buffer to exercise the memory channel, the host-side memory port being disconnected during such exercise as claims 1, 4-14 disclosed, and a memory module buffer including a memory access circuitry to reformat and relay data between the host-side memory channel port and the memory

device port as claims 15-20 disclosed, and a method of testing a memory channel independent of a host memory channel including issuing a control command to the first memory module buffer over a relatively low-speed bus independent of the host memory channel as claims 21-27 disclosed, and a computing device including a test circuitry on the first buffered memory device module to receive commands over the low-speed bus and respond by issuing memory commands over the second point-to-point memory channel to the second buffered memory module as claims 31-39 disclosed.

7. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 30 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Chang et al. (U.S. Patent No. 5,398,325), and others, does not teach the claimed invention having an article of manufacture comprising computer-readable media containing instructions that when executed by a processor, the processor to perform a method comprising selecting one of a plurality of buffered memory modules connected to the system management bus as the first buffed memory module, and address the transmitted command to the selected memory module.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarabian Amir can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Q. Le
Primary Examiner
Art Unit 2827



6/7/2006